Claims

1. A mobile communication terminal having an alarm function, comprising:

a receiving unit operable to receive a broadcast;

a position information acquisition unit operable to acquire position information of the mobile communication terminal;

a storage unit operable to store a plurality of pieces of broadcast station information that correspond to zones;

a determination unit operable to determine a zone to which the position information belongs;

a detection unit operable to detect a receiving intensity of the broadcast received by the receiving unit;

a control unit operable to (a) cause the receiving unit to start receiving a preset broadcast, (b) cause the position information acquisition unit, when a receiving intensity of the preset broadcast detected by the detection unit is less than a prescribed value, to newly acquire position information, (c) read a piece of the broadcast station information that corresponds to a zone determined by the determination unit based on the newly acquired position information, (d) cause the receiving unit to receive a broadcast identified by the piece of the broadcast station information, and (e) select a broadcast having a receiving intensity of no less than the prescribed value; and

an output unit operable to output the selected broadcast at an alarm set time.

2. The mobile communication terminal of Claim 1, wherein the control unit causes the receiving unit to receive the broadcast having a highest receiving intensity detected by the detection unit among the broadcasts identified by the piece of the broadcast station information.

3. The mobile communication terminal of Claim 1, wherein the position information acquisition unit acquires the position information of the mobile communication terminal using a GPS.

4. The mobile communication terminal of Claim 1, wherein the position information acquisition unit acquires position information of a base station by communicating with the base station, and defines the position information as the position information of the mobile communication terminal.

5. The mobile communication terminal of Claim 1, wherein the broadcast station information corresponds to one or more zones.

6. The mobile communication terminal of Claim 1, wherein the detection unit detects an electric field intensity of a receiving electric wave of the broadcast received by the receiving unit, and

the prescribed value is a value of an electric field intensity indicates that the broadcast is clearly receivable.

7. The mobile communication terminal of Claim 1, wherein the control unit, when the broadcast having the receiving intensity of no less than the prescribed value is not found, causes the output unit to output a built-in alarm sound.

8. The mobile communication terminal of Claim 1, wherein the control unit, to cause the output unit to output the broadcast at the alarm set time, starts the detection unit before a time period sufficient for selecting the broadcast having the receiving intensity of no less than the prescribed value.

9. An alarm output method in a mobile communication terminal having an alarm function, comprising the steps of:

receiving a preset broadcast;

detecting an electric field intensity of a receiving electric wave of the received preset broadcast;

judging whether the electric field intensity detected in the electric field intensity detecting step is no less than a prescribed value;

acquiring, when the electric field intensity is judged to be less than the prescribed value in the electric field intensity judging step, position information of the mobile communication terminal;

determining, based on the position information acquired in the position information acquiring step, a zone to which the position information belongs;

reading, based on the zone determined in the zone determining step, a piece of broadcast station information that corresponds to the zone;

selecting, by sequentially receiving a broadcast included in the broadcast station information read in the broadcast station information reading step, a broadcast of a receiving electric wave having an electric field intensity judged to be no less than the prescribed value in the electric field intensity judging step; and

outputting the broadcast selected in the broadcast selecting step, at the alarm set time.

10. An alarm output program for causing a computer of a mobile communication terminal to output an alarm, the processing procedure comprising the steps of:

receiving a preset broadcast;

detecting an electric field intensity of a receiving electric wave of the received preset broadcast;

judging whether the electric field intensity detected in the electric field intensity detecting step is no less than a prescribed value;

acquiring, when the electric field intensity is judged to be less than the prescribed value in the electric field intensity judging step, position information of the mobile communication terminal;

determining, based on the position information acquired in the position information acquiring step, a zone to which the position information belongs;

reading, based on the zone determined in the zone determining step, a piece of broadcast station information that corresponds to the zone;

selecting, by sequentially receiving a broadcast included in the broadcast station information read in the broadcast station information reading step, a broadcast of a receiving electric wave having an electric field intensity judged to be no less than the prescribed value in the electric field intensity judging step; and

outputting the broadcast selected in the broadcast selecting step, at the alarm set time.